

is without proper representation. The alpine flora has received full treatment, and special attention has been paid to the endemic genera. The editor says that he has also illustrated a number of plants of special interest "either on account of their economic value, or from biological or morphological reasons, or from their peculiar geographical distribution." He has not thought it necessary, however, except in a few special cases, to figure plants occurring in other countries as well as New Zealand.

It is interesting to note the result of the selection, as expressing in a general way the editor's opinion of what constitutes the main features of the New Zealand flora. Without going into detail, it may be stated that the families represented in this selection by more than ten species are as follows: Compositae (35), Gramineae (17), Filices (17), Orchidaceae (15), Umbelliferae (12), Scrophulariaceae (12).—J. M. C.

MINOR NOTICES

Pharmacognosy.—KRAEMER⁴ has published a textbook of pharmacognosy which is encyclopedic in its wealth of information. He recognizes the synthetic character of the subject, especially in its combination of botanical and chemical aspects. Moreover, both of these aspects are shown to involve the ecological conditions under which plants grow, so that scientific pharmacognosy is a very complex subject. After an introduction dealing with the problems involved, the great plant groups are presented, the large majority naturally being families of angiosperms, 94 in number, from which drugs are obtained. As stated by the author, the book is intended for students of pharmacy, pharmacists, food and drug analysts, and pharmacologists. We might add to this list students of economic botany, for pharmacognosy is one of the great fields of applied science.—J. M. C.

Citrus fruits.—COIT⁵ has published as a volume of BAILEY'S "Rural Science Series" an account of the citrus fruit industry, with special reference to the requirements and practices for California. It seems that the citrus industry has not only reached a high state of development in California and Florida, but is still progressing rapidly. The present volume discusses the underlying principles in such a way as to emphasize the importance of certain fundamentals which must be kept in mind. The industry as it exists at present is described, and all current information that seems valuable is organized and made available. Of special interest to the botanist are the chapters dealing with the geography and climate of California, the gross structure and habits of growth of citrus plants, and the citrus diseases and their control.—J. M. C.

⁴ KRAEMER, HENRY, Scientific and applied pharmacognosy. 8vo. pp. viii+857. *figs.* 313. Published by the author, 145 North 10th St., Philadelphia. 1915.

⁵ COIT, J. E., Citrus fruits. 8vo. xx+520. *figs.* 151. New York: Macmillan. 1915.